

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-4. Cancelled

5. (Currently Amended) A local RF receiver and baseband out intelligent device system for use in transmitting digital information on an RF carrier through a wideband distribution network, comprising:

at least one addressable device having at least one input and at least one output;

a BUD wideband distribution unit that receives a signal, which signal includes at least a digital signal portion, from the output of said at least one addressable device; and

an intelligent device that receives, from the BUD wideband distribution unit, a modulated RF signal carrying at least the digital signal portion thereon, wherein said intelligent device splits an IP portion from a non-IP signal portion of the digital signal portion, wherein said intelligent device removes the modulated RF carrier from the IP portion and sends the IP portion signal to the input of at least one addressable device, and wherein said intelligent device sends the non-IP signal portion to at least one standard outlet, said intelligent device comprising:

a demodulator that receives the modulated RF digital portion from said BUD wideband distribution unit;

a first digital combiner that combines at least two demodulated digital signal portions from said demodulator into one high speed digital transmission;

an RF splitter connected to the BUD wideband distribution unit, which RF splitter splits the modulated RF signal; and

at least two RF bandpass filters, wherein the first bandpass filter receives the modulated RF signal from said RF splitter and passes the IP signal portion of the modulated RF signal to said demodulator for output to the at least one addressable device, and wherein the second bandpass filter receives the modulated RF signal from said RF splitter and passes the non-IP signal portion of the modulated RF signal to the at least one standard outlet.

6. (Currently Amended) The local RF receiver/baseband out intelligent device system of claim 5, wherein said intelligent device further comprises: at least one DSP, wherein said DSP controls said demodulator based on an IP address associated with the IP signal portion of the modulated RF signal and said at least two RF bandpass filters.

Second Claim 6. Cancelled

7. - 21. Cancelled

22. (Currently Amended) An intelligent device system for local sending and receiving for use in transmitting digital information on an RF carrier through a wideband distribution network, comprising:

at least one addressable device having at least one input and at least one output, wherein at least one of said at least one addressable devices generates an incoming signal, wherein the incoming signal includes at least a digital signal portion;

an intelligent device that generates a modulated RF signal carrying the digital signal portion thereon;

a BUD wideband distribution unit that receives the modulated RF signal; and

at least one DSP, wherein said DSP controls the demodulation, and the splitting of the modulated RF signal by controlling at least two RF bandpass filters, wherein said DSP receives RF channel in use information from an RF channel detector, and receives traffic data, and wherein said DSP uses the RF channel in use information to select the RF modulated carrier, an RF carrier channel width, and an RF guardband width,

wherein said intelligent device receives a modulated RF signal carrying an IP portion and non-IP signal portion of the digital signal portion thereon from said BUD wideband distribution unit, wherein said intelligent device splits the IP signal portion from the non-IP signal portion, ~~wherein said intelligent device~~ removes the RF carrier from the IP signal portion and sends the digital signal portion to the input of at least one of the at least one addressable device, and wherein said intelligent device sends the non-IP signal portion to at least one standard outlet.

23. (Currently Amended) A local RF receiver and baseband out and wireless

intelligent device system for use in transmitting digital and receiving digital and analog information on an RF carrier through a wideband signal distribution network, comprising: at least one addressable device having at least one input and at least one output; a BUD wideband distribution unit that receives a signal, which signal includes at least a digital signal portion, from the output of said at least one addressable device; and an intelligent device that receives a modulated RF signal carrying an IP portion and a non-IP signal portion of the digital signal portion thereon, wherein said intelligent device splits the IP portion and the non-IP portion, which digital IP signal portion includes at least one wireless portion, and further splits the wireless portion from at least one non-wireless portion, wherein said intelligent device removes the modulated RF carrier from the IP portion and sends the IP signal portion to the input of at least one of the at least one addressable device, and wherein said intelligent device sends the non-IP signal portion to a standard outlet; a transcoder for sending the wireless portion from said RF splitter to a wireless port.

24. (Original) The system of claim 23, further comprising: a wireless demodulator for receiving transmissions from the wireless port, wherein said wireless demodulator is controlled by a DSP and sending those received wireless transmissions to the digital combiner.

25. (Currently Amended) An intelligent device system for local sending and receiving for use in transmitting digital information on an RF carrier through a wideband distribution network, comprising:

at least one addressable device having at least one input and at least one output, wherein at least one of said at least one addressable devices generates an incoming signal, wherein the incoming signal includes at least a digital signal portion;
an intelligent device that generates a modulated RF signal carrying the digital signal portion thereon;

a BUD wideband distribution unit that receives the modulated RF signal;
wherein said intelligent device receives a modulated RF signal carrying an IP portion and a non-IP signal portion of the digital signal portion thereon from said BUD wideband distribution unit, wherein said intelligent device splits the IP signal portion from a non-IP signal portion, which IP portion and non-IP digital signal portion include at least one wireless portion, and wherein said intelligent device splits the wireless portion from at least one non-wireless portion, wherein said intelligent device removes the modulated RF carrier from the IP signal portion and sends the IP signal portion to the input of at least one of the at least one addressable device, and wherein said intelligent device sends the non-IP signal portion to a standard outlet;
and

a transcoder for sending the wireless portion to a wireless port.

26. (Original) The intelligent device system of claim 25, further comprising a wireless demodulator for receiving transmissions from the wireless port.

27. (Original) The intelligent device system of claim 26, further comprising a DSP, wherein said DSP controls said wireless demodulator.

28. (Currently Amended) An intelligent device system for remote sending and wireless sending and wireless receiving of IP and non-IP information on an RF carrier through a wideband signal distribution network, comprising:

at least one incoming signal generator, wherein said at least one incoming signal generator generates an incoming signal including at least a digital portion; an intelligent device that generates a modulated RF signal carrying the digital portion thereon, said intelligent device having a wireless demodulator for receiving a wireless portion from a wireless port within said wireless device;

a transcoder for sending a wireless portion, which wireless portion includes at least a portion of the digital portion therein; and

a BUD wideband distribution unit that receives a non-wireless portion of the modulated RF signal; wherein the wireless portion and the non-wireless portion are split by said intelligent device, and wherein the splitting is controlled by at least one DSP.

29. Cancelled

30. (Currently Amended) A method for transmitting digital information on an RF carrier through a wideband distribution network, comprising:

providing at least one addressable device having at least one input and at least one output;

receiving a signal at a BUD wideband distribution unit from the output of said at least one addressable device, which signal includes at least an IP signal portion; and

receiving from the BUD wideband distribution unit at an intelligent device, a modulated RF signal carrying the IP signal portion thereon and a non-IP signal portion thereon;

splitting and filtering by the intelligent device of the IP signal portion from a non-IP signal portion;

removing, by the intelligent device, of the modulated RF carrier from the IP signal portion;

sending, by the intelligent device, of the IP signal portion to the input of at least one of the at least one addressable device;

sending, by the intelligent device, of the non-signal signal portion to a standard outlet; and

sending, by the intelligent device, of a wireless portion of the IP signal portion.

31. Cancelled

32. (Currently Amended) A method for transmitting digital information on an RF carrier through a wideband distribution network, comprising:

providing at least one addressable device having at least one input and at least one output;

generating, by at least one of said at least one addressable devices, of an incoming signal, wherein the incoming signal includes at least a digital signal portion;

generating a modulated RF signal carrying the digital signal portion thereon;

receiving, at a BUD wideband distribution unit, the modulated RF signal;

receiving, at an intelligent device, of modulated RF signal carrying the digital signal portion, which digital signal portion comprises an IP portion and a non-IP signal portion, thereon from the BUD wideband distribution unit;

splitting and filtering, by the intelligent device, of the IP signal portion from the non-IP signal portion;

removing, by the intelligent device, of the modulated RF carrier from the IP signal portion;

sending, by the intelligent device, of the digital signal portion to the input of at least one of the at least one addressable device;

sending, by the intelligent device, of the non-IP signal portion to a standard outlet; and

sending, by the intelligent device, of a wireless portion of the IP signal portion and the non-IP signal portion.

33. - 34. Cancelled

35. (New) An intelligent device for transmitting digital information on a radio frequency carrier through a wideband distribution network, comprising:

an input for receiving an incoming signal having a digital signal portion;
and

a processor that determines a number of radio frequency channels to carry the plural modulated radio frequency signals and distributes the digital signal portion of the incoming signal using plural modulated radio frequency signals.

36. (New) The device of claim 35, wherein the processor distributes the digital signal portion of the incoming signal using plural modulated radio frequency signals based on the determination of the number of radio frequency channels.

37. (New) The device of claim 35, comprising:
a radio frequency channel detector that generates radio frequency channel in use information.

38. (New) The device of claim 35, wherein the processor uses the radio frequency channel in use information to select the radio frequency channels, a radio frequency carrier channel width, and a radio frequency guardband width for distribution of portions of the incoming signal.

39. (New) The device of claim 37, comprising:
a traffic sensor that outputs traffic data to the processor for use by the processor in selecting a modulator to condition a portion of the incoming signal into a modulated radio frequency signal.

40. (New) The device of claim 39, wherein the processor uses both the traffic data and the channels in use information to select the radio frequency channels for output of the modulated radio frequency signal.

41. (New) A method of processing a signal, comprising:
determining a volume of data in the received signal, wherein a portion of the signal is a digital signal;
selecting, by a processor, based on the volume of data determined by the signal traffic sensor, a number of modulators to modulate portions of the received signal and a number of radio frequency channels on which to output the modulated signal portions;
outputting the modulated signal portions; and
updating the processor with information regarding the number of radio frequency channels in use.

42. (New) The intelligent device system of claim 22, wherein said channel in use information includes an IP address associated said digital signal portion of said received modulated RF signal.